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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,365	03/26/2004	Tsugio Okamoto	119261	7633

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EXAMINER

MRUK, GEOFFREY S

ART UNIT	PAPER NUMBER
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2853

MAIL DATE	DELIVERY MODE
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07/18/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.		Applicant(s)	
	10/809,365		OKAMOTO, TSUGIO	
	Examiner		Art Unit	
	Geoffrey Mruk		2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claim 2 is objected to because of the following informalities: The examiner notes a typographical error specifically "ink election surface". Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murayama et al. (US 5,757,399) in view of Sugimoto et al. (US 6,375,305 B2).

With respect to claim 1, Murayama discloses an inkjet printer (Fig. 4, element 302) comprising:

- a head (Fig. 4, element 305) including an ink ejection surface that ejects ink ;
- a cap (Fig. 4, element 306) capable of moving to come into contact with the ink ejection surface of the head (Column 17, lines 13-22), the cap includes an ink outflow channel where the ink ejected from the head flows out to external due to weight of the ink (Column 18, lines 11-17);
- a primary recovery portion (Fig. 15A, element 2) that allows the ink flowing out from the cap through the ink outflow channel to flow into the primary recovery

portion to recover the ink, the primary recovery portion being configured to move together with the cap (Fig. 11A-8B; Column 15, lines 36-41); and

- a secondary recovery portion (Fig. 15A, element 2032).

With respect to claim 2, Murayama discloses the primary recovery (Fig. 15A, element 2) portion moves together with the cap (Fig. 4, element 306) in a direction perpendicular to a direction in which a cap moves to come into contact with the ink ejection surface (Fig. 11A-8B; Column 15, lines 36-41); and the primary recovery portion comes into contact (Fig. 15A, element 13) with the secondary recovery portion (Fig. 15A, element 2032) and allows the secondary recovery portion to absorb the ink from the primary recovery portion when the primary recovery portion reaches a rest position where the primary recovery portion stops moving (Figs. 15A, 15B).

With respect to claim 3, Murayama discloses the primary recovery portion (Fig. 15A, element 2) moves forward and backward between two positions (Figs. 15A, 15B); the rest position is located in each of both ends in a moving direction of the primary recovery portion; and the primary recovery portion comes into contact with the secondary recovery portion when the primary recovery portion reaches the rest position in each of both ends (Column 18, lines 21-29).

With respect to claim 4, Murayama discloses a pressing mechanism (Fig. 15A, element 2030) that displaces a part of the secondary recovery portion interlocking with the motion (Fig. 15A, elements 2031a, 2031b) of the primary recovery portion to press the secondary recovery portion onto the primary recovery portion when the primary recovery portion reaches the rest position (Column 18, lines 36-49).

With respect to claim 5, Murayama discloses the primary recovery portion (Fig. 15A, element 2) includes an ink absorber (Fig. 15A, element 3) that absorbs the ink due to the capillary phenomenon (Column 18, lines 50-59).

With respect to claim 6, Murayama discloses a valve (Fig. 15A, element 13) that closes the ink outflow channel when the cap is in close contact with the head and opens the ink outflow channel when the cap is at a distance from the head (Fig. 15B).

With respect to claim 7, Murayama discloses an ink reservoir (Fig. 5, element 1655; Column 8, lines 64-66) disposed in the middle of the ink outflow channel (Fig 5, element 1658), the ink reservoir that reserves a part of the ink flowing into the ink reservoir from an upstream and allows the rest of the ink to overflow to a downstream, to make the reserved ink block gas flowing back through the ink outflow channel (Column 9, lines 43-56, i.e. recovery operation).

With respect to claim 8, Murayama discloses an ink reservoir (Fig. 5, element 1655; Column 8, lines 64-66) disposed at an outlet of the ink outflow channel (Fig. 5, element 1660), the ink reservoir that reserves a part of the ink flowing into the ink reservoir from an upstream and allows the rest of the ink to overflow to a downstream, to make the reserved ink block gas flowing back through the ink outflow channel (Column 9, lines 43-56, i.e. recovery operation).

With respect to claim 9, Murayama discloses the cap (Fig. 4, element 306) moves between a first position and a second position (Figs. 15A, 15B); when the cap reaches the first position, the cap is in close contact with the head (Fig. 12; Column 16, lines 45-50).

However, with respect to claim 1, Murayama fails to disclose an ink absorber in the secondary recovery portion, which draws and absorbs the ink due to a capillary phenomenon from the primary recovery portion to recover the ink.

Sugimoto discloses a waste ink tank and an ink jet recording apparatus where "The waste ink tank 30 in this embodiment is installed on a base 20 supporting the recording apparatus, and has partitioning walls 21 on four sides for forming a waste ink container body. A waste ink absorber 31 for absorbing and retaining waste ink is accommodated in a space defined by the partitioning walls 21" (Column 4, lines 60-65) and "The waste ink thus introduced falls down onto the part of cross mark (x) on the base 20 and when the ink is brought into contact with the waste ink absorber 31 in the vicinity of the cross mark, it is absorbed due to a capillary action of the absorber" (Column 13-17).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to use the absorber disclosed by Sugimoto in the waste ink catch of Murayama. The motivation for doing so would have been "to provide a waste ink tank and an ink jet recording apparatus capable of avoiding the leakage of waste ink from a waste ink storage by the improvement in the waste ink absorbing performance thereof through a simple and inexpensive constitution" (Column 2, lines 29-35).

Response to Arguments

Applicant's arguments filed 7 May 2007 have been fully considered but they are not persuasive. The applicant's arguments that "The Office Action acknowledges that

Murayama does not disclose a secondary recovery portion, as recited in claim 1” and “Accordingly, Sugimoto does not disclose a secondary recovery portion including an ink absorber, which draws and absorbs the ink due to a capillary phenomenon from the primary recovery portion to recover the ink, as recited in claim 1” are not persuasive.

As stated in the non-final rejection dated 5 February 2007 and in the final rejection, Murayama discloses a secondary recovery portion (Fig. 15A, element 2032). Sugimoto discloses a waste ink absorber that absorbs ink due to capillary action (Column 5, lines 15-16) in a waste ink container body (i.e. second recovery portion). Therefore, the combination of Murayama in view of Sugimoto meets the claimed limitations.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey Mruk whose telephone number is (571) 272-2810. The examiner can normally be reached on Monday-Friday 7:30am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

GSM
7/16/2007

GM


STEPHEN MEIER
SUPERVISORY PATENT EXAMINER